THE

Baltimore Monthly Journal

OF

MEDICINE AND SURGERY.

Vol. I. *June* 1830. No. V.

Original Essays.

ART. I.—*Case of Compound Fracture of the Femur. By B. Ticknor, Surgeon, U. S. Navy.*

IN the month of July, 1827, while the Frigate Macedonian was lying in the harbour of Rio Janeiro, an American vessel arrived there, and I was requested by the Captain to see one of his men who had fallen from aloft nearly five days before, and was severely injured. I went immediately, and found the man, (whose name was John Ashburn, and who was about twenty-seven years of age) in a truly wretched condition. He was lying on deck, apparently much exhausted, and suffering great pain; and my attention being directed to the injury, I found the left lower extremity, from the foot to the hip, very much swollen and inflamed, and the thigh considerably hurt; from which it was evident, that there was a fracture of the femur, and by removing a strip of canvass, which had been put around the thigh, I discovered that the fracture was compound. On removing the oakum which had been applied to the wound, the entrance of it was found to be nearly closed by the larvæ of

the fly; some of which were of such a size, as to have aggravated considerably the patient's sufferings. It has been mentioned, that the accident happened nearly five days before, and the vessel being small and destitute of accommodations, the patient had been obliged to remain on deck, exposed to the weather, during the whole of this time. Owing to the ignorance and inattention of the Captain, those means to which common sense alone would direct one's attention in such cases, had not been employed; and nothing more had been done, than to apply a little oakum to the wound. The fracture was about five inches above the knee, and was very oblique. The wound was on the outside of the thigh, and was probably made by the upper fragment of the bone.

As might well be supposed, the patient had suffered extremely during the time that he had remained in this situation; and he was so much exhausted by pain and fever, which had been greatly aggravated by the motion of the vessel, that there appeared but little probability that his life could be saved. The whole limb, as has been mentioned, was very much swollen and inflamed; there was evidently considerable displacement of the fractured extremities of the bone; and a profuse discharge of a thin sanies had taken place from the wound.

There being a large and commodious Hospital at Rio, into which foreign seamen are admitted free of expense, it was proposed to the patient to be taken there, where it was believed he would have a much better chance for his life, than he could have on board our ship, especially as we were expecting soon to go to sea. But he had such a dread of the Brazilian Hospital, from the reports he had heard; and was so anxious to be removed to the ship, that I was induced, with the approbation of the Commodore, who manifested much sympathy for the poor fellow, to have him taken on board.

It being evident from the state of exhaustion to which the patient was reduced, and from the swelling and inflammation of the limb, that the only chance of saving his life, consisted in an

attempt to save the limb, the measures proper for this purpose were immediately employed. The patient being placed in a cot on the deck, the fracture was reduced, or at least as nearly so as circumstances would admit of, and the limb was secured by means of an apparatus similar to Boyer's, which I had ready at hand. Dry lint was applied to the wound, and secured by adhesive straps. The patient was now put into a boat and taken on board the Frigate, and his cot swung between the second and third decks, in the place appropriated for the sick; where he was least affected by the motion of the ship, which, even in a harbour that is but little exposed to the influence of the wind and sea, is sufficient to cause uneasiness to a fractured limb, unless carefully guarded against.

The patient bore his removal without complaining, and he now experienced great relief from his sufferings; but such was his state of debility and exhaustion, and so profuse was the discharge from the wound, that it was necessary to have immediate recourse to tonics. Bark, wine, and opium, were administered as freely as the stomach would bear; and their beneficial effects soon began to appear, in an increase of strength, a return of the appetite for food, and in the increased strength and fulness of the pulse. The limb was kept constantly wet with an evaporating lotion, and the swelling soon began to subside; and the discharge at the same time began to assume a more healthy appearance, and to diminish in quantity, though it continued rather profuse for some time longer. The swelling and soreness of the limb rendered it impossible to make such a degree of extension as to restore it to its natural length, and bring the fractured extremities into exact opposition; but a slight degree of it, sufficient to prevent any farther shortening, could be borne without inconvenience, and this was kept up by means of the apparatus that has been mentioned.

For about two weeks the patient continued to improve as well as could be wished; and there seemed to be a probability that his cure might progress without interruption. His general

health, indeed, had improved so much during this period, that before the end of the second week, the tonics were discontinued; and a great improvement had also taken place in the condition of the limb. But at the time to which I now refer, that is, when the patient had been about two weeks on board, the ship went to sea, and remained out upwards of fifty days, during which time, very little progress was made towards recovery. Soon after we sailed; he began to complain of pain in the knee of the fractured limb, which now became considerably more swollen than it had been, and so excessively tender, that he could not bear even the slight degree of extension, which, till this time, had been kept up. By the use of cooling lotions, however, the swelling subsided in the course of a few days; but so much tenderness remained, that it was impossible to renew the extension again to such a degree as to answer any useful purpose. It was, therefore, wholly discontinued, but the apparatus was kept on for the purpose of preserving the steadiness of the limb.

Soon after the swelling of the knee had ceased to occasion the patient much uneasiness, he was attacked with peritoneal inflammation, which, though not very severe, rendered him extremely restless, and greatly aggravated his other sufferings. He was relieved, however, in the course of a few days, by means of calomel and opium, fomentations and blisters, and again restored to a comfortable state, and seemed to have a prospect of making some progress towards recovery. But this was of short duration; for he soon sunk into such a state of debility, as threatened to prove fatal, and required all the aid that tonics could afford. By the diligent use of these means, however, he was recovered from this state in the course of a few days; and from this time, although he afterwards suffered several slight attacks of abdominal disease, his general health continued tolerably good during the rest of his confinement.

Such was the state of the patient's health when we returned from sea, about the first of October; and although some improvement had taken place in the fractured limb, yet much less

progress had been made towards recovery than was anticipated at the end of the second week. The swelling had, indeed, in a great measure subsided, and the wound had closed; but not the least advance had apparently been made towards re-union.

After remaining about three weeks at Rio, we sailed for the River Plate, where we arrived early in November. Although the patient's general health continued tolerably good during this time, and notwithstanding the wound remained closed, and the limb was so well secured by means of the long splints, as to prevent any motion of consequence between the fractured extremities; yet, when we arrived at the River Plate, more than three months after the accident, there was no evidence that reunion had commenced. Before the end of the fourth month, however, it was evident that it was beginning to take place, and it continued to advance until it was completed; though so slowly, that it could scarcely be perceived from one week to another. Soon after it became evident that the process of reunion had commenced, the wound, which had appeared to be permanently healed, opened again, and caused considerable apprehension for the safety of the limb. After the wound had remained open about a month, and the patient had suffered a good deal of pain and irritation, a fragment of bone was discovered at the bottom of it, which was removed by enlarging the wound, and was found to be about three-fourths of an inch long; was very rough, and comprised about one half of the circumference of the bone. The wound now ceased to be troublesome, and very soon healed.

By the end of the fifth month the limb had acquired so much firmness, that the patient was able to be taken out of his cot and set up a short time; but it was a month longer before he could begin to bear any weight on it. The knee remained swollen and stiff for a long time; indeed, it was twelve months before the patient had regained the free use of it. There was a shortening of the limb of an inch and a half, or two inches, which was much greater than it probably would have been, if

it had not been necessary to discontinue the extension on account of the affection of the knee.

On the passage home, the patient had the small-pox in a confluent form, and for some time was in great danger of being carried off by it; but at the time of our arrival in the U. States, (Nov. 1828) he had nearly regained his health, and the fractured limb had become as strong as the other; so that he was able to walk about with but little inconvenience.

ART. II.—*A Case of Gonorrheal Opthalmia cured by the external application of Balsam Copaiva.*

PROFESSOR SMITH,

Sir,—Should you deem the following case worthy of public notice, you are at liberty to insert it in your Journal.

On the 16th March, 1830, I was requested to visit the daughter of ———, æt. 4 weeks; who was represented to be afflicted with sore eyes. On calling upon the patient, I found her labouring under Opthalmia in a most aggravated form. The eyelids were very much swollen; there was great aversion to light, attended with a discharge of a yellowish matter, similar to that which issues from the urethra in gonorrhea; the condition of the cornea could not be ascertained. This disease manifested itself about the second week after birth. The old lady who officiated on the occasion, attributed it to a severe cold which the mother had suffered previous to her confinement. But I was not disposed to agree with her, for I was well acquainted with the character of the child's father, and suspected he had communicated gonorrhea to his wife, and that the child had contracted the disease during labour. On inquiry, I learned that both of them had had the disease for several months, consequently I was correct in my supposition respecting the cause of the disease. The difficulty now presented itself as to what

plan of treatment I should pursue; for, this being a disease of a specific nature, would require more than ordinary treatment. In order that I might have a little time for reflection and to examine some authorities on the subject, (for I must acknowledge I was at a loss to know what to do,) I prescribed merely a gentle purge of rhubarb and magnesia.

18th. There was no alleviation of the symptoms. The medicine operated kindly. Directed the following collyrium. Sulph. Zinc. gr. i.—Aq. oz. i.; to be used twice or three times a day—aperient mixture once a day.

20th. I found my little patient no better. I knew, unless I could arrest the disease very soon, loss of sight would be the consequence. Recollecting that the eye and the urethra were lined with membranes of a similar nature, and that there could be no difference between their diseases arising from the same causes, I was determined to try the effects of the Balsam. I prescribed Bal. Copaiv. gtt. i.—to be introduced into each eye, twice a day.

24th. The discharge was not so great, the swelling had sufficiently subsided to enable me to examine the eyes, which were highly inflamed; intolerance of light still continues.

The balsam produced great distress, so much so that the child cried for some time after its application. As there was some amendment of the symptoms, however, I was induced to continue it. Directed: Balsam, one part—Ol: Oliv: two parts—one drop three times a day to each eye.

30th. The eyes presented their natural appearance, with the exception of a slight opacity of the cornea—the pupils, however, perfectly visible. Prescribed the Zinc Collyrium—and Vin. Opii.

April 16th. Discharged the patient cured.

I am now treating the father for the disease situated in its *proper place*. The mother is well.

Yours, respectfully,

ISAAC COLE.

ART. III.—*Experimental Inquiry into the causes of the Spontaneous Cessation of Hemorrhage from Lacerated Arteries. By N. R. Smith, M. D.*

The opinions which have been stated by various surgeons, relative to the spontaneous cessation of hemorrhage from lacerated arteries, are exceedingly vague and contradictory. From this we may infer that the subject has not been thoroughly investigated by experiment. M. Richerand states, that large arteries, when ruptured, become closed (*se resserrent*) partly in consequence of the chill which they suffer, producing spasm; and partly by the pressure which the muscles within which they retract exercise upon them.* M. Delpech states, that when a limb has been torn from the body, the principal artery is sometimes broken within the parts of the stump which have resisted the violence, and sometimes within the lacerated limb, so as to hang out at the wound. In neither case, he says, is hemorrhage apt to take place. He has so much confidence in the security of the vessels, that he advises not to seek for them, in treating lacerated wounds, unless they bleed.† Mr. Charles Bell says, "A torn artery dose not bleed. I have heard it affirmed that, in this case, the blood was stopped by the rugged portion of the inner coat of the vessel, which is torn into shreds by the violent elongation of it. It has been said, if we disclose the radial artery of a dead body, and, putting a probe under it, tear it forcibly, the inner coat will present an appearance of valves to intercept the flow of blood. I believed in this statement, but, upon the experiment being repeated, I found that in a young and healthy artery, the change could not be exhibited." Professor Gibson asserts that the indisposition manifested by a lacerated part to bleed, is owing to the injury sustained by the nerves, not only in the immediate vicinity of the wound, but to a greater

* Nosographie Chirurgicale, tom. 1. p. 70.

† Précis Maladies Chirurgicale, tom. 1. p. 188.

extent around than the eye can discover. Hence the arteries are paralyzed, and do not contract to propel the blood, which coagulates in their cavities, or among the torn muscular fibres.*

It is apparent, therefore, that the mode in which hemorrhage from lacerated arteries is arrested, is by no means an established principle in surgery. For the purpose of furnishing facts which may aid to render it such, the following experiments were instituted:

Experiment 1.—Having exposed the fermoral artery of a young slut, not fully grown, I passed a smooth iron hook under it, and lacerated the organ with a sudden pull. Blood immediately gushed from it in a rapid stream, and continued to flow copiously, for about four minutes. At the end of that time, the blood on the table began to coagulate, and, simultaneously, the bleeding began to be less impetuous. It gradually diminished, and in ten minutes had ceased altogether. The animal was then shut up, but suffered to move about the room. No bleeding recurred. At the end of twenty-four hours she appeared quite well, moved the limb with freedom, and took food greedily. She was then killed with prussic acid. On examining the limb it was found slightly swelled. Blood was injected in small quantity into the common tissue, and a coagulum was formed in the sheath around the artery. The upper extremity of the artery was not retracted between the muscles, but was quite superficial. The external coagulum did not exercise much pressure upon it, for its extremity was larger than natural. I then dissected the artery from its sheath, to the extent of three or four inches, and opened it longitudinally, from above downwards. Two inches from the wound I encountered a slender coagulum which increased in diameter as I traced it downward, and which completely stuffed the organ for one inch from its orifice. The external coat presented a lacerated margin which, however, had become somewhat indistinct by the effusion of lymph. The in-

* Gibson's Surgery, vol. 1. p. 92.

ternal coat was lacerated transversely in many places. Into many of these, slips of the internal coagulum were inserted; the blood which had issued from the fissures, appeared to have incorporated itself with that which filled the vessel, and thus to have at first attached the coagulum. From many other fissures a very apparent quantity of lymph had been effused—had blended itself with the coagulum, and fixed it so firmly in its place, that it was difficult to scrape it away. The artery was so firmly stuffed with the coagulum as to be considerably dilated. Not a drop of blood could possibly have escaped from it in this state.

Experiment 2.—The carotid artery of a full-grown dog, of large size, was exposed on the left side of the neck, and lacerated as before. The artery broke deep in the chest, and bled for five minutes with great rapidity. The animal then gave signs of fainting, but they soon disappeared, and the blood quickly ceased to flow. He was suffered to live four hours, during which time there was no bleeding. He was then killed, and while dying he struggled very violently, but there was still no bleeding. The chest was then opened and the artery traced from its origin. It proved to be a branch of the innominata. Its internal coats were broken at its very orogin. The external tunic was broken at the distance of an inch and a quarter from the innominata, the internal coats were withdrawn from within the external, which formed a loose pouch projecting from the innominata and stuffed with a firm coagulum. In this case there was no lymph effused, time enough not having elapsed. The external coagulum was voluminous and firm, occupying the interstices of the adjacent organs, and extending to the external wound. It had not, however, made pressure enough to interfere with respiration. The cervical portion of the broken artery was hanging from the wound, to the extent of two inches. This had also bled freely, at the moment of the rupture, but had soon ceased to do so. Its internal coat was ruptured transversely at many places, to the extent of three inches. Near the ex-

tremity it was filled with a coagulum which adhered to the transverse fissures in the internal coat. It must have been, of itself, an effectual barrier against the effusion of blood.

Experiment 3.—I procured a horse twelve years of age, of pretty good constitution, though very lean, and having cast him upon his side, laid bare the carotid. I then passed a smooth iron under the artery and broke it as I had done in the previous experiments. The blood gushed in a torrent from the wound, and, in a few minutes, the animal lost two or three gallons. In about ten minutes the blood upon the ground began to coagulate, and then the diminution of the rapidity of the current was manifest. The extremity towards the chest hung out at the wound, to the extent of three inches. While the blood was flowing rapidly the animal moaned once or twice, as if faint, but soon after, he rose from the ground without difficulty, and stood till the blood had entirely ceased to flow, which was after about thirty minutes from the time the artery was ruptured. The projecting artery was then returned to its place and the wound closed. The animal was suffered to live for twenty-four hours, during which time he appeared nearly as vigorous as before the operation, and took food with avidity. He was then killed by a blow on the head, but, while dying, he struggled very violently. Blood gushed from small vessels in the wound, and I feared, at first, that the obstructions in the artery had given way. But on examination I discovered that not a drop of blood had issued from either extremity of the artery. The lower portion of the artery was found perfectly naked, to the extent of three inches from the rupture. Beyond this its sheath was occupied with a coagulum of blood as was also the common tissue in the vicinity. No lateral pressure, however, was exercised on the artery to impede the passage of blood, as the organ was even increased in volume. The interior of the artery was found plugged with a coagulum six inches long, which completely filled its cavity for nearly its whole extent. The internal coat, as in the preceding experiments, was ruptured transversely at a great many places,

and little productions of the internal coagulum were inserted into them so firmly that they must have securely fixed the coagulum as soon as coagulation had taken place. From many of the fractures in the internal coat lymph, in quantity, had been effused, and become blended with the coagulum, which was thus so firmly attached to the surface of the organ that it required an effort to detach it. No blood could possibly have passed through it, and as the coats of the artery every where retained their vitality, no secondary hemorrhage could have subsequently occurred. The accompanying Plate accurately represents the preperation which I made of the parts by slitting open the artery longitudinally and leaving the coagulum in its place.

Figure 1, marks the entire artery; figure 2, the coagulum; figure 3, the internal surface of the organs marked with the transverse fissure in the internal coat; figure 4, the point at which the thyroid branch was given off. Hence the coats were much lacerated and a great quantity of lymph was effused, sealing up the organ.

Experiment 4.—The carotid of a large dog was laid bare, raised with a hook from its sheath, and divided. Its extremities then retreated into the sheath. The gush of blood was impetuous, but, at the first moment, little if any more so than when, in experiment 2d, the artery was torn. There occurred no abatement in its force, however, till the animal fainted, which was after five minutes. The bleeding then almost entirely ceased for a moment, but presently returned, and in less than ten minutes the animal expired. The abdomen of this dog was then opened, a hook was passed under the aorta and the vessel was broken. The organ being dissected out was then examined. Its internal coat was ruptured, precisely as by similar means in the other experiments. In some places it was peeled up from the middle coat, so as to form pockets on the side of the artery; but this was the only instance in which I found any thing of the kind.

Experiment 5.—I opened the abodomen of a large dog, and having exposed the aorta above its bifurcation, I attempted to break it in the manner mentioned above. The flow of blood was very rapid, and this, together with the irritation necessarily produced from the exposure of the abdominal organs, rapidly prostrated the powers of life, and the animal died in about five minutes. There was, however, an ineffectual effort at reaction. No other result could have been expected in this experiment, because the bleeding was so copious as to destroy life before coagulation could be effected. On examination I found that the aorta itself was not ruptured, and that the laceration had taken place in the external and internal iliacs. The blood, therefore, had flowed from several large trunks, a wound of either of which is ordinarily fatal. I was surprised to find, however, that each of the lacerated arteries had its orifice closed with a coagulum, which had probably been formed *in articulo mortis*. The internal coat of each was lacerated as in the other experiments, and a portion of the external coat, in every instance, projected beyond the lacerated margin of the internal coats, to the extent of half an inch or more. The extremity of each artery appeared enlarged and bulbous from the presence of the coagulum within it, adhering to its rough, cellular surface. I was persuaded that, had not the flow of blood been so rapid as to destroy life before coagulation could be completed, this animal would not have perished immediately.

The above experiments will, I think, justify the following conclusions:

1st. That Dr. Jones errs in ascribing the cessation of hemorrhage from lacerated arteries mainly to the same causes which avail against bleeding from divided arteries. In the experiments detailed above, the retraction and contraction of the organ availed nothing. The same was true in regard to the external coagulum, which according to Dr. Jones is the principal agent. In each of the experiments, the extremities of the vessel were rather dilated than constricted or compressed. In one instance

(*Exper.* 3.) the artery hung naked from the wound, and yet the bleeding ceased as promptly as under other circumstances.

2d. Equally untenable in the doctrine that the artery is paralyzed by the shock inflicted upon its contractile tissue, and that the blood refuses to flow through a passive tube. In every experiment there was extensive injury inflicted upon the artery, and in one, the organ was torn from the surrounding parts to a great extent; consequently its vital intercourse with them must have been for a time interrupted, and its own actions suspended. This paralysis of the artery should be most perfect instantly after the injury; but we find that the blood then flowed in a rapid stream, which was undiminished till it had time to coagulate. It is true that in those cases on record in which limbs have been torn from the body, there has been, even at the moment after the injury, no considerable bleeding. But this has undoubtly arisen from the shock given to the general system, and the suspension of the action of the heart, till the blood had coagulated in the extremity of the artery.

3d. Although the pockets, or valves mentioned by Mr. Bell, were in one experiment formed on the sides of the lacerated vessel by the rupture and partial detachment of the inner coat, yet these were not found efficient in suppressing hemorrhage in a single instance, when the experiment was performed on the living animal.

4th. The efficient, and almost only cause of the cessation of hemorrhage from lacerated arteries is the unequal laceration of the external and internal coats. Generally the internal coat is fractured transversely at numerous places, so as to present an indefinite number of small fissures, into which the blood of the artery is injected, and thence, perhaps, conveyed by interstitial absorption into the arterial tissues. Blood, also, probably flows from the ruptured tissue, and mingles with that in the cavity of the artery. As soon as coagulation begins to take place, blood concretes, probably first on the fissures produced in the internal coat, attaching itself to the rough surface which is there pro-

duced, and insinuating itself into the interstices in such a manner that the coagulum becomes so firmly fixed as to resist the impulse of the circulating blood.

When an artery is smoothly cut, and the integrity of the inner coat is uninjured, the coagulum finds no point-d'appui, or roughness upon which it can take hold. The surface is every where polished and lubricated for the very purpose of facilitating the passage of the blood, and therefore the internal coagulum, as it forms, either glides from the artery, when the organ is very large, or perhaps does not form at all, the particles finding no rallying point within the vessel. But when the internal membrane is extensively ruptured, the blood must necessarily concrete upon the lacerated surface, precisely as it is uniformly observed to do in other wounds.

In some instances the complete separation of the internal coats will take place at some distance from that of the external, or cellular, which will then hang as a loose pouch from the end of the more rigid middle coat. Its surface being cellular and lacerated, the blood, rushing along it with force, is injected into this tissue, coagulates upon it, and attaches itself firmly to it. The external coagulum, which forms in the lacerated sheath, will then aid to sustain the internal coagulum and suppress the hemorrhage.

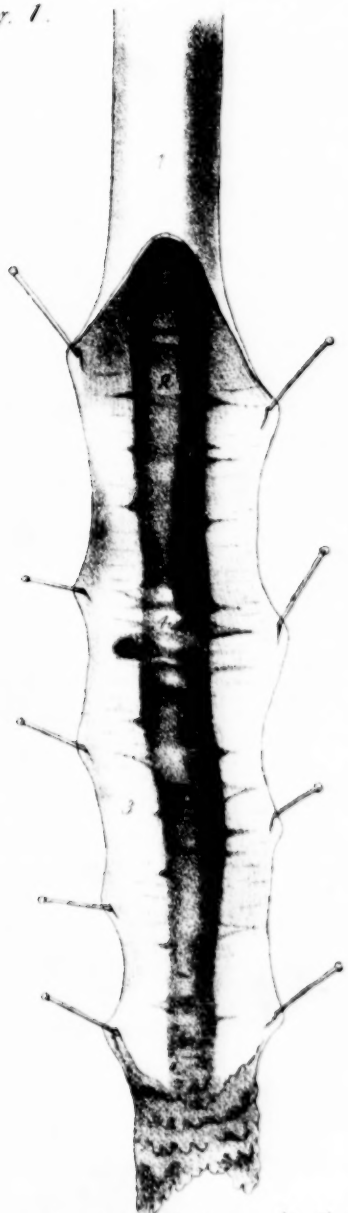
After the internal coagulum has remained attached for some hours to the fissures produced in the internal coat, from each one of the ruptures there takes place the effusion of lymph. This still more firmly attaches the coagulum to the internal surface of the organ, and the more effectually stuffs it cavity. Finally it takes the place of the coagulum of blood, and obliterates the cavity of the artery.

It may be asked, if nature resorts with so much uniformity, precision and effect, to these means for suppressing hemorrhage from lacerated arteries, how does it occur that fatal hemorrhage should so often result from the rupture of arteries which are broken without a corresponding rupture of surrounding parts and

of the skin? These injuries are sometimes inflicted on large vessels in effecting the reduction of old dislocations. Many cases of the kind are on record. The probability is that arteries thus yield in these instances, sooner than the surrounding parts, because they are diseased and brittle. The external coat having lost its extensibility in consequence of the deposition of lymph in and around it, breaks abruptly without effecting the laceration of the internal coat at more than one place. Besides, we know that when there is no external wound, effused blood does not coagulate with facility, and remaining fluid, opposes no obstacle to fatal hemorrhage. If Mr. Scudamore's explanation of the coagulation of blood be correct, it refuses to coagulate promptly, under these circumstances, because it cannot exhale its carbonic acid.*

*Scudamore on the Blood.

Fig. 1.



Carotid Artery & Coagulum.

Fig. 2.

Worm
from the Heart of a Dog.

Lith. of Endicott & Swett Boston

Adversaria.

Art. I.—*Worms in the Heart.*

Mr. Wm. H. Selby, of Worcester County, Maryland, at present my pupil, has furnished me with specimens of a species of worm found in the heart and pulmonary arteries of a dog. The animal had been afflicted with a severe cough for a year previous to his death, and had had occasional paroxysms of hæmoptysis, attended with much embarrassment of the respiratory function. He at length died from pulmonary hemorrhage, and from inflammation of the thoracic viscera. Mr. Selby made a post-mortem examination of the body. The lungs were found to have been highly inflamed and engorged. There was water in the thoracic cavity, in considerable quantity. The pericardium was healthy, and there was no unusual quantity of fluid in its cavity. There was nothing unusual in the external appearance of the heart, except that it was considerably hypertrophied. On laying open the right ventricle, it was found more than half full of worms, something resembling the human lumbricus.—They were of the length of fourteen inches, slender, pointed acutely at each extremity; and extending through half the length of each an intestine could be discerned. The body of the worm was white and very firm—of almost ligamentous hardness. Those found in the ventricle were rolled up in three or four distinct coils, five or six in each coil. The auricle, also, contained them, and the pulmonary artery was stuffed with them. Tracing the pulmonary artery to its ramifications in the

lungs, the animals were found in many of its branches. It was also discovered that many of them were lodged in the substance of the lungs, chiefly in one cavity, which was near a large branch of the bronchius. There was one portion of the external surface of the lung, of the diameter of twelve lines or more, which seemed perforated with many foramina, as if it had been pierced by worms. None were found, however, in the cavity of the pleura, but the foramina were found, on dissection, to lead to a cavity in the lungs where they were lodged. None were found in the pulmonary veins.

I have in my possession a portion of the pulmonary artery and between twenty and thirty of the worms. Mr. Selby informs me that all which were found would have filled a half pint measure.

There are other cases on record in which worms have been found in the heart—some given on the authority of Senac, but I am not able to discover one in which these animals so completely made the cavity of the organ their home, and multiplied to such a surprising extent, inhabiting the heart for a year or more, and at last causing the death of the animal.

Is it possible that the embryos of these animals were inhaled by the dog, entered the lungs, perforated the vessels of those organs and thus reached the heart? If this be regarded as irrational, then is the question settled, in regard to the entrance of the eggs of these animal into the circulation.

N. R. SMITH.

ART. II—*Interesting Fact demonstrating the influence of the Chloride of Lime in neutralizing Miasmata.*

Mr. Joseph Patterson, of this city, acquainted the editor of this Journal with the following fact, which appears more conclusive than any thing with which we have met, relating to this subject. Mr. P. is the proprietor of a flour mill, on the Gun-

powder river, a few miles from this city, located in a low and marshy situation. The lower apartment of the mill, containing the machinery, is paved with stone, a plank floor which was first put down having decayed very rapidly, in consequence of the extreme dampness and warmth of the place. Flour, from the upper apartment of the mill, sifts through the floor in some quantity, and readily undergoing putrefaction, may be supposed to have produced all the mischiefs which arise, from vegetable fermentation. The apartment was very offensive to those employed in it, and the workmen soon discovered that every one who worked in it, in repairing the machinery, for three hours, was invariably attacked with some form of intermittent or bilious fever. At length it became very difficult to prevail upon men to enter the room at all, and its bad reputation had become a serious evil. At this time the intelligent proprietor saw some statement relative to the antiseptic virtues of the chloride of lime, and immediately procured a quantity, and, from time to time, had it sprinkled upon the pavement of the mill. *Since that time, not a single case of disease has been known to be produced by exposure in the apartment.*

Analytical Reviews.

ART. I.—*Contribution to the Pathology of Phlegmatia Dolens. By Robert Lee, M. D. &c. &c.*

WE find a valuable article under the above title in the last volume of the Medico-Chirurgical Transactions. The subject is a part of the debateable ground of our science; and our readers will, therefore, be pleased with a brief analysis of a paper which promises to throw some light upon it. Dr. Lee, in the true Baconian method, begins by laying down his facts. These are found in cases which he details at length.

Case I.—Mrs. J.——, æt. 31, was delivered of her fifth child, March 10th, 1827, after protracted labour, with severe pain, shooting into left thigh and leg. This subsided, and all went on well 'till the 14th. She then began to suffer pain in left groin and calf of leg, with numbness in the whole limb, tumefaction and tenderness in the groin; occasional rigors—furred tongue—thirst—bowels open—pulse 80—flow of milk and lochia natural. 16th. Pain more severe, particularly from groin to knee on the inside, where there was swelling of a glistening white appearance. 19th. Pain diminished, but swelling increased and extended to leg and foot—both tense and not pitting on pressure; skin not discoloured—pain relieved by flexion of the limb. 24th. Pain greater—pulse quicker, the skin hot and moist; patient dejected and restless. 25th. Patient first seen by Dr. Lee. Whole member then much swelled—especially ham and calf of the leg; surface smooth and shining, of a cream-like colour; pitting on pressure, more in some places

than in others. Temperature not higher than in the other limb, though she complained of sense of heat—much pain in inner and upper part of thigh on moving. Immediately below Poupart's ligament, in the situation of the femoral vein, a thick hard cord, about the size of the little finger, was distinctly felt. This cord, which rolled under the finger, and was very sensible, could be traced four inches in the course of the femoral vessels, and pain was felt on pressure as low as the middle of the thigh. Pulsations of the femoral artery felt in usual situation; pressure over this vessel created little or no pain. Pulse 90, and sharp—tongue furred—thirst urgent—bowels confined—lochia nearly disappeared. The usual depletory means were employed in the treatment of this case; leeches, discutient lotions, anodynes, cathartics, febrifuge medicines, &c. &c. were put in requisition, and she was at length restored to health.

Eleven months after this attack, she again became pregnant, but, November 5, 1828, she perished from uterine hermorrhage, after the birth of a dead infant. The limb previously diseased was then carefully examined. It was found to be considerably larger than the right, but no serous fluid escaped from the incisions; beneath the skin there was found a thick layer of dense, granular adipose matter. The iliac and femoral vessels, together with their sheath, were carefully removed for examination. The common iliac and its divisions, with the upper part of the femoral veins, so resembled a ligamentous cord, that, on opening the sheath, the vessel was not, until dissected out, distinguishable from the cellular substance around it.—Opening the middle portion of the vein, a firm thin layer of lymph was found, in some places adhering close to, and uniting its sides—in others clogging, but not distending it. On tracing it up, it was observed, above Poupart's ligament, to become gradually smaller, so that in the situation of the common iliac, it was lost in the surrounding cellular substance, and its entrance into the cava could not be seen. The cava was natural. Entrance of the internal iliac completely closed, and in the por-

tion examined, its inner surface was coated with an adventitious membrane. The lower end of the vein removed was open, but its coats more dense than natural, and the inner coat was lined with a strong membrane, which diminished it considerably in its calibre, and here and there fine bands of the same substance ran from one side of the vessel to the other; the outer coat strongly adhered to the artery and sheath. The inguinal glands adhered firmly to the vein, but were otherwise healthy. It cannot be doubted that these morbid appearances were the result of the disease in the member, the symptoms of which have been related.

Case 2. This was of a lady, Mrs. P——, æt. twenty-seven. She was delicate in constitution. For the two last months of pregnancy, she had been afflicted with œdema of the right superior extremity—varicose enlargement of the veins—pain in the thigh and groin, particularly in the latter. She was delivered, Dec. 8, 1827, after a labour somewhat difficult, but natural, of a healthy child. During the succeeding week she suffered much pain in the hypogastrium and right iliac and inguinal regions. The pain then disappeared, but returned again on the 21st, with rigors, fever, stiffness and tenderness in whole limb. Dr. Lee saw her on the 22d; limb much swollen, integuments tense and elastic, pitting slightly along the tibia, but not on the thigh, but great pain was produced there by pressure, along the femoral vein, which felt as if enlarged, rolled under the finger, was hard and incompressible. Pain shot along the great vessels—heat in limb—high degree of febrile excitement. 25th, worse—right labium swelled; integuments pale, shining, and every where pitting when strong pressure was made. Next day the other limb appeared to be assuming the same form of disease—fulness and pain in iliac region—leg swelled and hot. No enlargement of vein was felt, but there was some pain along its course, through groin and thigh. On the 28th the swelling of right extremity diminished, and the indurated vein could be felt in groin, but there was pain still. In the left extremity the

disease progressed, the limb being swelled, stiff, hot, painful and pitting on pressure—left labium swelled—femoral vein felt enlarged and hard—pain down the thigh to point where it leaves the ham—pressure there produced pain. Countenance pale and sunk—pulse rapid—great irritability and prostration of strength. 29th, swelling still greater in the limb last attacked and rendering the vein obscure. The symptoms, however, gradually yielded, and on the 12th of Feb. the pain had abated though limbs week, and ankles swelled. No enlargement along the femoral vessels. The cure was effected in this case by the means usually employed under such circumstances—bleeding—purging—cold lotions—anodynes, &c. &c.

There are other cases contained in an appendix to the paper, which the author adduces as corroborating his opinion that inflammation of the veins of the thigh and abdomen is the immediate cause of the morbid phenomina in phlegmatia dolens. They are, however, far less satisfactory, in this respect, than those which we have analyzed above, and we deem it by no means unjust to the author to omit them.

Our readers will bear in mind, that the doctrine advocated by our author is not original with him; indeed he does not claim it as such. This opinion was first promulgated by Mr. Davis of London, and, very near the same time, by M. Velpeau. But, although so ably advocated, the explanation is still to be received with great caution. In our last number we gave an analysis of a paper, by Mr. Arnott, on phlebitis, which the writer presents to our view in a most frightful aspect. Indeed, from general observation, as well as from his remarks, we infer that phlebitis is a disease of far more formidable character than phlegmatia dolens ordinarily is. Indeed, the former is almost always fatal, while the latter is rarely so. Mr. Arnott maintains that inflammation of the veins is the cause of those extensive depots of pus which occur in various parts of the body, after certain wounds. He asserts, also, that these are a characteristic result of that affection. Now, such occurrences ne-

ver attend the progress of phlegmatia dolens; consequently the advocates of one or the other must be in the wrong, and perhaps both of them are so. The opinions of each, however, are sustained by very plausable facts, and they therefore merit an attentive examination. From the collision of opposite opinions, although they alone emit no light nor heat, scintillations of truth may be struck out.

Art. II.

SELECTED FROM THE MEDICO-CHIRURGICAL REVIEW.

Proposal of a Plan for the Investigation of the due Administration of Blood-letting. By *Marshall Hall*, M. D. &c.

We learn from this little brochure that Dr. Hall is prosecuting with his usual zeal, and, we have no doubt, with his usual ability, the very important subject of blood-letting. No remedy is now more general—not even calomel or blue-pill—and this fact may assure us that no remedy is more abused. It is certain that if several persons be bled deliquium in the erect posture, they being of apparently similar strength, but affected with dissimilar diseases, they will be found to have lost very different quantities of blood before the fainting is induced. Dr. Hall has known a patient, not apparently very feeble, to faint on losing four ounces of blood—whilst he has seen other patients bear the loss of 50, 60, or even 70 ounces of blood without syncope. How is this to be explained?

"Its rationale is to be found, I believe in connection with an equally interesting fact, that different diseases induce the constitution different powers or susceptibilities in regard to the effects of loss of blood. Each disease appears, indeed, to possess its own peculiar and intrinsic virtue in this respect. This is determined by placing the patient perfectly erect, and bleeding to incipient syncope; the quantity of blood which flows is the measure of the protective influence of the disease in one class of cases, and of its influence in superinducing a susceptibility to the effects of blood in the other.

"An interesting scale of diseases may be formed representing these properties. It would begin with congestion of the head, or tendency to apoplexy; inflammation of the serous membranes, and

of the parenchymatous substance of various organs, would follow; and lastly, inflammation of the mucous membranes. This part of the scale would be divided from the next by the condition of the system in health. Below this would be arranged fever, the effects of intestinal irritation, some cases of delirium, reaction from loss of blood, and disorders of the same class with hysteria, dyspepsia, chlorosis, and cholera morbus." 4.

Persons in health and of moderate strength, will generally faint if bled in the erect posture, on taking fifteen ounces of blood. Dr. H. has known seventy ounces to be taken in the sitting posture, in tendency to apoplexy, without syncope. But this is an extreme case. Patients with pleuritis frequently bear the loss of 35 ounces of blood without fainting. "In bronchitis little more is borne to be lost than in health."

"A stout person in fever will frequently faint on losing ten, twelve, or fourteen ounces of blood. In intestinal irritation, with urgent symptoms even, the abstraction of nine or ten ounces of blood will generally induce deliquium. In delirium tremens, or puerperal delirium, the patient soon faints from loss of blood. The same thing is still more observed in those cases of violent reaction, which arise from loss of blood itself. In dyspepsia, hysteria, and chlorosis, the susceptibility to syncope from loss of blood is very great. And I have known a patient, of good strength, affected with cholera, faint on taking four ounces of blood, although she had shortly before borne to lose nearly twenty ounces without faintishness, under the influence of inflamed mamma." 5.

The solution of these differences, Dr. H. thinks, must be found in the different nature of the diseases themselves. In all those cases, he observes, where the circulation of the heart and larger arteries only is affected, and especially in such as involve irritation or exhaustation, there is early syncope on taking blood. But in such cases as consist in an affection of the capillary circulation, and especially such of these as affect the head, it requires the abstraction of much blood to induce deliquium.

"Syncope is prevented by the influence exerted by this state of the capillary circulation over that of the heart and larger arteries, and over the whole system, and especially over the circulation within the brain; and it does not entirely subdue the morbid action of the capillary vessel even when induced. To induce syncope in pure fever, we have then to subdue the state of reaction in the heart and larger arteries. In inflammation, we have not only to do this, but to overcome the influence of a permanent morbid action of the capillaries; this is especially observed in inflammation of the serous membranes and within the head." 6.

The practical application of this fact consists chiefly in its affording a rule for blood-letting in all cases in which this measure is required to be fully instituted—a guard against undue blood-letting, both in this and some other cases—and a source of diagnosis.

"The quantity of blood which flows when a patient requiring full blood-letting is placed upright and bled to deliquium, seems accurately proportionate to the exigencies of the case. In inflammation much blood should be taken; and much blood will flow before deliquium is induced: in irritation, little blood should be drawn; and there is early syncope from blood-letting. The quantities are even accurately suited, not only to the exigencies of the disease, but to the powers of the system; at least so it appears to me from considerable experience.

"The rule is suited also to the degree and the duration of the disease, for, with each of these, its influence in inducing tolerence or intolerence of loss of blood is respectively augmented.

"It is not less adapted to those most frequent of all events, mixed cases. Inflammation and irritation may be conjoined. For example, there may be mere nephralgia, or absolute nephritis, from calculus, or a mixed case involving both. There may be mingled intestinal irritation, and inflammation. In each of these circumstances, the rule for blood-letting which I have proposed, adapts itself accurately to the demands of these various morbid affections, and to the actual strength and condition of the general system.

"It is difficult to say whether more injury has been done by an undue or by an inefficient use of the lancet. In inflammation we must bleed fully. In irritation we must bleed cautiously. Inefficient blood-letting in the former disease, and undue blood-letting in the latter, are alike dangerous or even fatal to the patient; from both extremes we are guarded by the rule which I propose. By directing the patient to be placed in the erect position, and bled to deliquium, we often take much more blood than we should have ventured to prescribe, in inflammation, and very much less than we might be disposed to direct, in irritation; and in both these cases the rule conducts to the only safe mode of treatment.

"A further practical application of this fact, flows from the adoption of the rule. In doubtful cases it furnishes us with a fresh means of diagnosis. If much blood has flowed before syncope occurred, we must suspect inflammation; if little we must suspect that, however similar the symptoms, the case is in fact of a different nature,—perhaps irritation, perhaps exhaustion. For further information on these two states and affections of the symptoms, I must refer my reader to a little work in the press, entitled Researches on the Morbid and Curative Effects of Loss of Blood, in which they will be particularly discussed." 9.

The principal object of this precursor of a larger work is to solicit the co-operation of the author's medical friends in the further investigation of the subject. With the view of obtaining facts by the multitude of which alone the propositions can be established or corrected, he proposes that, in every case in which full blood-letting is to be instituted, the patient should be placed perfectly erect in a chair or in bed, and bled to the very first appearance of syncope. The quantity of blood taken is then to be noted, and accurately registered in a table. The same thing is to be observed on each repetition of the bleeding. The various facts which he proposes to register may be seen in the following table.

Age and strength of the patient.	Disease, its stage & complications.	Quantity of blood taken	Effects on the patient and diseases	Appearances of the blood.	Repetitions of the blood-letting.	Effects.

D. H. observes, in conclusion, that he does not think it safe, in any case, to bleed to deliquium in the recumbent posture.—There can be few, if any cases, in which, if it be proper to bleed fully, danger can accrue from bleeding to the most incipient syncope in the perfectly upright position. Besides, the remedy is at hand. We have only to lay the patient in the recumbent posture, and, if necessary, raise the feet and depress the head.

We shall be anxious to see the promised work, announced by the talented author in one of the foregoing extracts.

Art. III.

SELECTED FROM THE MEDICO-CHIRURGICAL REVIEW.

Of some Symptoms in Children erroneously attributed to Congestion of the Brain By *Robert Gooch*, M. D.

The above is the title of the sixth chapter in Dr. Gooch's recent publication, and the subject is of very great importance. The chapter opens in a ludicrous manner, considering the gravity of the subject; but the moral inculcated deserves to be remembered.

"I remember when a boy reading a story of two knights-errant who arrived on the opposite sides of a pedestal surmounted by a shield; one declared it was gold, the other that it was silver; growing angry, they proceeded to blows, and after a long fight each was thrown on the opposite side of the shield to that where he began to fight—when both immediately detected their error; the knight who had said it was silver finding that on the opposite side it was gold, and the knight who had said it was gold finding that on the opposite side it was silver. This story, a little modified, is a good illustration of the state of medical opinion in this age, perhaps in all ages; medical men have no occasion to tilt, for they all throng on one and the same side of the shield; they look only at the golden side, and never dream of the possibility that on the opposite side it may be of a different metal." 355.

Dr. G. properly remarks that two sets of symptoms are distinguishable in cases of disease, and require to be discriminated. One set of symptoms forms what may be called the physiognomy of the complaint—the other indicates the morbid state of organization on which the disease depends.

"Two patients complain occasionally of dimness of sight, swimming of the head, singing in the ears, and observe if they turn the head on one side to look at an object they feel as if they should fall; but the one is plump, florid, and has a full pulse; the other is pale and thin, has cold hands and feet, and a pulse small and feeble. One practitioner bleeds them both, the other bleeds the one, but does all he can to give blood to the other. The latter cures both his patients; the former cures the one but ruins the health of the other; but such is the nature of the human mind that the cases *for* a preconceived opinion are retained easier than those *against* it.—He remembers his good deed, forgets the other, or calls the case 'anomalous,' and marches on, without the slightest doubt that bleeding is the universal and sovereign remedy for dimness of sight, swimming of the head, and singing in the ears, save and except only in 'anomalous' cases." 357.

Dr. G. is anxious to call the attention of medical men to a disorder of children which he finds invariably attributed to, and treated as, CONGESTION or INFLAMMATION of the brain; but which he is convinced often depends on or is connected with, an opposite condition of the circulation. It is chiefly indicated by heaviness of head and drowsiness. The age of the little patients is generally from a few months to two years or three.—They have, in our author's experience, been rather small of their age, in delicate health, and exposed to debilitating causes.

"The physician finds the child lying on its nurse's lap, unable or unwilling to raise its head, half asleep, one moment opening its eyes, and the next closing them again with a remarkable expression of langour. The tongue is slightly white, the skin is not hot, at times the nurse remarks that it is colder than natural; in some cases there is at times a slight and transient flush: the bowels I have always seen already disturbed by purgatives, so that I can scarcely say what they are when left to themselves; thus the state which I am describing is marked by heaviness of the head and drowsiness, without any sign of pain, great languor, and a total absence of all active febrile symptoms. The cases which I have seen have been invariably attributed to congestion of the brain, and the remedies employed have been leeches and cold lotions of the head, and purgatives, especially calomel. Under this treatment they have gradually become worse, the languor has increased, the deficiency of heat has become greater and more permanent, the pulse quicker and weaker, and at the end of a few days, or a week, or sometimes longer, the little patients have died with symptoms apparently of exhaustation. In two cases, however, I have seen, during the last few hours, symptoms of oppressed brain, as coma, stertorous breathing, and dilated and motionless pupil." 358.

Dr. Gooch relates an instructive case illustrative of the above remarks, where leeches were applied to a child two years old, and the result was fatal. This case and some incidental remarks are so interesting that we shall here insert them.

"A little girl, about two years old, small of her age and very delicate, was taken ill with the symptoms which I have above described. She lay dozen, languid, with a cool skin, and a pulse rather weak, but not much quicker than natural. She had no disposition to take nourishment. Her sister having died only a week before of an illness which began exactly in the same way, and which was treated by leeches and purgatives; and some doubts having been entertained by the medical attendant of the propriety of the treatment, leeches were withheld, but the child not being better at the end of two days, the parents, naturally anxious about their only surviving child, consulted another practitioner. The case was imme-

diately decided to be one of cerebral congestion, and three leeches were ordered to be applied to the head. As the nurse was going to apply them, and during the absence of the medical attendants, a friend called in who had been educated for physic, but had never practised it, and who had great influence with the family: he saw the child, said that the doctors were not sufficiently active, and advised the number of leeches to be doubled. Six, therefore, were applied; they bled copiously; but when the medical attendants assembled in the evening they found the aspect of the case totally altered, and that for the worse; the child was deadly pale, it had scarcely any pulse, its skin was cold, the pupils were dilated and motionless when light was allowed to fall on them, and when a watch was held to its eyes it seemed not to see; there was no squinting. Did this state of vision depend on the pressure of a fluid effused into the brain since the bleeding, and during this exhausted and feeble state of circulation, or did it depend on the circulation of the brain being too languid to support the sensibility of the retina? It is well known that large losses of blood enfeeble vision. I saw a striking instance of this in a lady who flooded to death. When I entered the chamber she had no pulse, and she was tossing about in that restless state which is so fatal a sign in these terrific cases. She could still speak, asked whether I was come, (she knew I had been sent for,) and said 'am I in any danger?—How dark the room is!—I can't see.' The shutters were open, the blind up, and the light from the window facing the bed fell strong on her face. I had the curiosity to lift the lid, and observe the state of the eye; the pupil was completely dilated, and perfectly motionless, though the light fell strong on it. Who can doubt that here the sensibility of the retina depended on the deficiency of its circulation? But to return to the little patient. The next day she had vomited her food several times; it was therefore directed that she would take no other nutriment than a dessert spoon-full of ass's milk every hour, and this was strictly obeyed, and continued for several days. The child wasted, her features grew sharp, every now and then she looked fretful, and uttered a faint squeaking cry; the eye-balls became sunk in the socket, like those of a corpse that had been dead a month; the skin continued cool, and often cold, and the pulse weak, tremulous, and sometimes scarcely to be felt. Under this regimen, and in this way, she continued to go on for several days. At times she revived a little, so as to induce those who prescribed this treatment to believe confidently that she would recover, and she clearly regained her sight, for if a watch was held up to her she would follow it with her eyes. She lived longer than I expected; a full week, and then died with the symptoms of exhaustation, not with those of oppressed brain. The head was opened by a surgeon accustomed to anatomical examinations, and nothing was found but a little more serum than is usual in the ventricles." 361.

Our author concludes that the heaviness of the head and drowsiness, which were attributed to congestion in the brain, really depended on a deficiency of nervous energy—that the bleeding and scanty diet aggravated this state, "and insured the death of the child."

Dr. G. was summond one day to see a child, to whose head the medical practitioner was about to apply leeches. He found the child lying on its nurse's lap, exactly in the state already described; with the same unwillingness to hold up its head—the same drowsiness—languor, absence of heat and of all symptoms of fever. Dr. G. took the medical attendant into another room, and told him the history of the preceding case and of several others of a similar kind. Instead of applying the leeches, they agreed to give from a pint and a half to a quart of ass's milk in the 24 hours—and to take ten minims of the aromatic spirit of ammonia every four hours. When they met next day, the nurse was walking about the nursery with the child upright in her arms. It looked happy and was laughing. The same plan was continued another day, and on the succeeding day Dr. Gooch took his leave.

"So inveterate is the disposition to attribute drowsiness in children to congestion of the brain, and to treat it so, that I have seen an infant, four months old, half dead from the diarrhœa produced by artificial food, and capable of being saved only by cordials, aromatics, and a breast of milk; but because it lay dozing on its nurse's lap two leeches had been put on the temples, and this by a practitioner of more than average sense and knowledge. I took off the leeches, stopped the bleeding of the bites, and attempted nothing but to restrain the diarrhœa, and get in plenty of nature's nutriment, and as I succeeded in this, the drowsiness went off, and the child revived. If it could have reasoned and spoke it would have told this practitioner how wrong he was; any one, who from long defect in the organs of nutrition, is reduced so that he has neither flesh on his body, nor blood in his veins, well knows what it is to lay down his head and doze away half the day without any congestion or inflammation of his brain. This error, although I have specified it only in a particular complaint of children, may be observed in our notions and treatment of other diseases, and at other periods of life. If a woman has a profuse hæmorrhage after delivery, she will probably have a distressing head-ache, with throbbing in the head, noises in the ears, a colourless complexion, and a quick, weak, often-thrilling pulse, all which symptoms are greatly increased by any exertion. I have seen this state treated in various ways, by small opiates, gentle aperients, and unstimulating nourishment, with no relief. I have seen blood taken away from the head, and

it has afforded relief for a few hours, but then the head-ache, throbbing and noise have returned worse than ever; the truth is, that this is the acute state of what in a minor degree and in a more chronic form occurs in chlorosis, by which I mean pale-faced amenorrhœa, whether at puberty or in after-life. It may be called *acute chlorosis*, and like that disease is best cured by steel, given at first in small doses, gradually increased, merely obviating constipation by aloetic aperients." 365.

Dr. Gooch is unwilling to encumber this paper with a multiplicity of cases, but states generally that the above are only specimens of a class, of which he has seen enough to convince him that they deserve the attention of the profession. Dr. Gooch refers to the excellent remarks of Dr. Marshall Hall on this class of affections. Dr. G. candidly acknowledges that he has been anticipated by Dr. Hall, on this point, but so far from regretting it, he rejoices to find himself supported by such good authority.

"The children who were the subjects of this affection, and were thus treated, died not with symptoms of oppressed brain, but with those of exhaustation, and on examining the head after death, the blood vessels were unusually empty, and the fluid in the ventricles rather in excess; in two instances death was preceded by symptoms of effusion, viz: blindness, a dilated pupil, coma, and convulsions; and after death the ventricles were found distended with fluid to the amount of several ounces, the sinuses, and veins of the brain being remarkably empty. I believe the prevalent notion of the profession is, that all sudden effusions of water into the brain are the result of inflammatory action; but putting aside for a moment this dogma of the schools, consider the circumstances of this case. For several days before death, all that part of the circulating system which was cognizable to the senses, was at the lowest ebb consistent with life, and after death the blood-vessels of the brain were found remarkably empty of blood, and the ventricles unusually full of water. From such facts I can draw no other inference than this, that this sudden effusion was a passive exudation from the exhalents of the ventricles occasioned by a state of the circulation the very opposite to congestion of inflammation. This is corroborated by the dissection of animals which have been bled to death. Drs. Saunders and Seeds, of Edinburgh, found that in animals bled to death, whether from veins or arteries, there was found more or less of serous effusion within the head, and Dr. Kelly thus expresses himself:—'If instead of bleeding usque ad mortem we were to bleed animals more sparingly and repeatedly, I have no doubt that we should succeed in draining the brain of a much larger quantity of its red blood; but in such experiments we shall, I think, find a larger effusion of serum.' * * * * * * * * * * * * *

'Though we cannot, by general depletion, entirely or nearly empty the vascular system of the brain as we can the vessels of the other parts of the body, it is yet possible, by profuse hæmorrhages to drain it of a sensible portion of its red blood, that the place of this spoliation seems to be supplied both by extra and intra vascular serum, and that watery effusion within the head is a pretty constant concomitant or consequence of great sanguineous depletion.' But if this is true, it is of great practical importance, for if we take delicate feeble children, and by bleeding and purging for an imaginary congestion of the brain, reduce their circulation to a very low ebb and keep it so, we run the risk of producing that very effusion of serum into the brain which we are endeavouring by our remedies to prevent." 368.

Dr. Gooch does not expect that medical men will take his word as conclusive evidence for the truth of this paper—nor does he wish it. All he asks is that they will allow his observations and reasonings to lead them to look out for similar cases, and judge for themselves.

"With regard to the point that heaviness of head and drowsiness in children often depend not on congestion, but on deficiency of nervous power, and require for their cure not depletion, but support, I am quite satisfied that candid observers will find that I am right. With regard to the other point, that sudden effusion of serum may take place in the brain from a state of the circulation, the opposite to congestion or inflammation, it is more likely, even if true, to be overlooked; for such is the force of preconceived opinion, and such the prevalent notions on the subject, that the following will be the process in most minds. A child has been suffering some obscure symptoms for many days, when suddenly and unexpectedly it becomes blind, its pupils are dilated and motionless, it becomes convulsed, comatose, and dies. On opening the head serum is found in the ventricles, and without any further inquiry it is immediately taken for granted, that this effusion was the effect of overlooked inflammation of the brain, and regret is felt that active depletion had not been employed; the inference may be a correct one; all I contend for is, that it should not be taken for granted, but that those circumstances should be minutely inquired into which throw light on the state of the circulation in which the effusion occurred." 374.

We strongly recommend Dr. Gooch's observations to the attentive consideration of our professional brethren.

Abstract of Foreign Medicine.

PATHOLOGY, PRACTICE, AND MATERIA MEDICA.

Case of Poison by Cantharides in powder, succeeded by the detachment and expulsion of the Mucous Membrane of the Œsophagus. This was the case of a man named Nelze, to whom I was called on the 8th June, 1826. I found him suffering with burning heat in the mouth, throat and stomach; with excessive pains in the loins and about the region of the bladder, accompanied by great desire to void urine, without a possibility of effecting it, although he forcibly pressed upon the abdomen with both hands. The mouth quite excoriated—ptyalism and nausea continual; the tongue was agitated with evident convulsive motions; the pulse small and frequent On examining the nature of the matter he had thrown up, I distinguished portions of the mucous membrane, and likewise fragments of cantharides. Three hours had already elapsed since the ingestion of the cantharides, the quantity of which, however, had not been ascertained. The patient, parched with thirst, had swallowed in succession four or five tumblers of water, and told me that, half an hour before taking the flies, he had eaten bread and onions.

I sent for ipecacuanha, (20 grs.) but before it came, I administered half a pound of olive oil, which the patient swallowed with the greatest reluctance; the ipecac. soon followed, and before long had effect: from observing considerable quantities of the flies in the ejected matter, I concluded that a very large dose had been taken. A short time after I forced Nelze to swallow as much as two pounds more of sweet oil, which was followed in half an hour by 2 oz. of castor oil. The patient had several copious stools, and the fecal matter still contained cantharides. The castor and olive oil were again repeated with the same success. At night, there were convulsive motions of the thoracic and pelvic members; the priapism continued, the urine was red or bloody; there was febrile heat in the abdomen; the pulse small and frequent, and subsultus tendinum. The olive oil internally and as an enema, were again resorted to—the pain, about the throat, stomach, loins and bladder still continued; 10 leeches were applied to the neck, 20 to the epigastrium, and as many to the perinæum. As soon as they dropt off, I kept the patient in a bath for three-fourths of an hour.

The next day, (9th June,) the urine still bloody, eyelids closed—patient agitated—so desirous of quitting his bed that it was necessary to keep him there by force; the pulse still frequent, though not so small as before; pain still continuing in the region of the bladder. Thirty leeches were applied to it, and the bath, linseed tea, and repeated emollient enemata were employed. At night, the urine less bloody; some desire to vomit, but much more tranquillity. At 11 o'clock the same night vomiting came on, and the whole of the mucous membrane of the œsophagus was expelled.*

*The cylindrical tube, now sent you in the phial, was detached with great pain to the patient, and its detachment brought with it a quantity of blood. It was much lacerated about the extremities, but the middle part for the space of an inch and a half was perfectly sound. On the external surface I could distinguish several capillary blood vessels, and some folds, all in a longitudinal direction. On the internal surface there were many particles of cantharides. As the membrane has been now for upwards of two years in diluted spirits of wine, its colour is no longer red, nor can the capillaries be perceived.

On the 10th, the pulse was better, the urine less bloody, and there was considerably less pain; the same remedies were repeated, with the addition of milk, diluted with a decoction of barley, but deglutition was extremely painful.

On the 11th, the patient had opened his eyes, and on my entering the room he extended to me his hand, saying, with an air of the most lively satisfaction, "You have saved my life."

Notwithstanding his assurance, I still had doubts concerning the cure, on account of the injury done to the œsophagus by the detachment of the mucous membrane. It might be supposed that it was a spurious membrane, produced by vesication, or other causes; but I entertain no doubt concerning its nature, on account of the complete organization of the membrane. The tongue still convulsively agitated, and very red in certain parts—ptyalism still continued, as well as the pain attending deglutition; the urine more natural, no longer priapism, or pain on voiding urine. I prescribed milk, broth, gargarisms of honey, baths, emollient enemata—the patient desirous of leaving his bed.

On the 12th, no fever, but still heat in the mouth, exudation of a matter so glutinous as with difficulty to be detached. Urine copious and clear—the same remedies directed as on the preceding day.

On the 13th, rather more pain in the œsophagus—gargarisms and poultices to the neck—the other symptoms the same, and the same prescription.

On the 14th, the patient asked for wine and food—took rice milk, broth, vermicelli, preserves, and ptisan of gum. Deglutition more easy.

On the 15th, 16th and 17th, same state—same remedies.

On the 18th, the pain in the œsophagus bringing on cough—great pruriency in the rectum—slight diarrhœa—directed baths, enemata, poultices, rice, milk with ptisan of gum.

Nineteen, twenty, twenty-one, visible progressive improvement.

On the 22d, tongue less red, less agitated—salivation less—the patient can swallow solid aliment, for which he is constantly asking—in the deglutition thereof experiences no more pain than with liquids. There were no longer any ulcerations in the mouth, by which I was induced to believe there were no longer any in the œsophagus. Since then I have seen this man from time to time, and all the functions are admirably performed.

It is proper to add that I had previously attended him for acute hepatitis, which assumed subsequently a chronic form; this, with domestic troubles, urged him to that desperate act. He has since had many causes of trouble, infinitely more distressing than before, but I find him more gay and happy than antecedently to his first disease—for which I account by supposing that the antiphlogistic treatment followed, in consequence of the ingestion of the poison, together with the emollient regimen subsequently adopted, removed the hypochondria, as well as the chronic affection of the digestive organ.

[*Translated and condensed from the description given by Dr. Rouquayrol—Annals of Medicine, Oct.* 1829.

The department of Pharmacy, of the Royal Medical Academy, offer the following question as the subject for the premium to be awarded in 1830.

"To analyze the Blood of a person with the yellow jaundice, and so compare it with that of a person in health as to establish the chemical differences between them."

The ancients considered the blood as the common source whence nature extracted all the materials necessary to constitute organized beings. At a later period it was believed that the blood contained only the elements which were collected together and elaborated by the various organs. Latterly the beautiful experiments of Mr. Brande on the colouring principle of the blood, of Mr. Chevreul on the elements of several animal fluids, of Dumas and

LeRoyer on the existence of urea in the blood of animals, from whom the kidnies had been taken, appear to substantiate the correctness of the opinions of the ancients.

The academy believes, 1st, that the question can be resolved by considering the cases of disease in which the functions of certain organs are suspended, disturbed or partially impeded.

2d. That it is all-important to discover by chemical experiments whether, in jaundice and other affections of the heptic system, bile, or its immediate elements exist in the blood, as some researches have already led us to suspect and as has been concluded from the high colour of the urine in icteric patients.

Those who will take up the subject, may likewise inquire into the nature of the principle which gives to animal fluids a yellow tinge, and contributes particularly in warm seasons and countries, to render the complexion of such as are said to look bilious, more or less dark.

The premium is to be a gold medal, valued at one thousand francs.

Memoirs upon the subject must be written in French or Latin, and addressed in the ordinary form, before the 1st September, 1830, to the Secretary, Rue de Poitiers, No. 8, Paris.

According to the 91st acticle of the regulations, nominal and honorary members of the Academy, are alone excluded.

Dr. A. G. Testa on Diseases of the Heart.—This is a work of reputation, recently given to the profession by an Italian. We abstract the following notice of it from the North American Journal. In the first book the author treats of the causes of the heart's morbid alterations. He adduces many facts to show that they are often inherited, being transmitted often through many successive generations. Rickets and malformation of the chest are with propriety charged with the frequent production of cardiac diseases. Rickets, (the morbid state of the nutrient system which gives rise to the phenomina of the disease, rather than the deformity of joints, &c.) he regards as one of the most important causes. Indeed, he regards the diseases of the heart, which occur in rickets, to be antecedent to curvature of the spine, enlargement of the head, &c. &c. and the immediate causes of them. He states that imperfect minor or pulmonary circulation, in these cases, produces venous congestion, from which there result engorgements of the liver and spleen increased by the feebleness of the right side of the heart. These results by causing pressure on the diaphragm impede still further the pulmonary circulation and the general functions of the heart. He thinks that the great enlargement of the head which takes place is owing to the impediment which is presented to the free return of the blood to the right auricle and ventricle. He thinks that the good effects of cold bathing confirm this opinion. Spinal curvatures cause, or aggravate diseases of the heart by the impediment which they oppose to the free exercise of the functions of the organ.

But the more immediate and important causes of derangement of function and structure in the heart are *emotions of the mind—powerful and irregular passions.* It is stated that the brain thus influences the heart through the medium of the nerves. It needs no ghost, come from the grave, to tell us that. The author and the reviewer enter into a learned disquisition to show why the heart should be thus powerfully influenced through the medium of nerves which are so small as are those of the heart. The conclusion is that the nerves of this organ are more perfect and more delicately organized than others, having less of the neurilema, or cortex of the nerves in other parts, and that they actually convey more nervous influence than do the nerves which are appropriated to the voluntary muscles. In proof of this he says

that the heart, by stimulation, is made to contract more powerfully than other muscles, and therefore its nerves must have more power. It would seem however that the author had not properly considered the doctrine of Haller and Philip in relation to this subject. Those authors inform us that the heart is not excited to ordinary contractions through the medium of the nerves, at all, as are the voluntary muscles, and indeed, in our opinion, they give abundant proof of it. The heart is stimulated by its contents, as the voluntary muscles are by the will. The nerves of the heart, then, have no other office but to establish associations between this organ and others, and hence it is very easy to account for the shocks which it receives from impressions made on other organs.

By the influence of violent passion, the circulatory and respiratory organs simultaneously suffer. Indeed, it could not be otherwise, they are so intimately associated in function.

The emotions of the mind productive of disease of the heart are the strong passions, which, obviously to the eye, work powerfully upon the physical constitution of man. This is manifest in the livid features of rage, the glowing excitement of love, the pallor and almost paralysis of despondency and grief. It is in the circulatory system particularly, that these impulses are felt. Diseases of the heart, therefore, are particularly frequent in seasons of public calamity and excitement. The passions influence the heart, not merely through the nerves, modifying the circulation, but by disturbing the necessary correspondence of action between the heart and lungs. The depressing passions, then, which produce sighing and sobbing, and thus disturb respiration, impede the circulation through the lungs, and thus cause it to delay in the right side of the heart and great veins. The influence of passion on the heart is the more strongly felt when there is an effort made by the sufferer to suppress the outward expression of it. Concealment is the worm in the bud, but clamorous grief does not prey upon the heart. Exclamations give an impulse to the blood in the lungs, and relieve the heart of its accumulating load—they also produce general re-action and excitement—they ease the "stuffed bosom of the perilous load which weighs upon the heart." Excessive joy also sometimes produces the instant death of the heart, of which there are many instances on record.

Diseases of prior origin in the thoracic cavity are also causes of organic alterations in the heart; effusions; empyema; vomicæ; any thing, indeed, which may impede the circulation in the lungs, or mechanically oppress the heart. Pulmonary engorgement from bronchitis, without expectoration; spasmodic cough, very much impeding respiration and the circulation, morbidly influence the heart.

Primary diseases of the stomach and intestines are prolific sources of functional and organic disease of the heart. The stomach and heart are supplied with nerves from the same source—hence their well'known sympathy. Irritation of the stomach and intestines is very often promptly felt in the heart; witness the heart-ache of the hypocondriac. Every practitioner has often encountered affections of the heart simulating angina pectoris, and which were at once known to arise from derangement of the functions of the stomach. These organs may also influence the heart by a more direct and mechanical agency. The stomach and colon, when distended with gas, or other matters, press the diaphragm strongly upon the heart, and are often observed to produce palpitations; hence incubus at night, after gorging the stomach. The liver is, as we should expect, greatly concerned in heart affections. The great ascending cava is closely embraced by this organ, which also sends to it its own large veins. The cava, from the liver to the heart, is but a few lines in length. It is easy to conceive then, how the heart's functions may be disturbed by the liver, which can so much controul its supply of blood.

When the liver is engorged, tumid, or indurated, it must obviously impede the entrance of blood into the heart.

Scurvey and syphilis are regarded as causes of disease of the heart—also mercury if imprudently given for cure of syphilis. All laborious occupations which interfere with the healthy expansion of the chest are injurious to the the heart. Porters and others who carry heavy burthens are thus exposed.

Metastasis of diseased action located in other parts of the body is also numbered among the causes which involve the heart in diseased action. The diseases which are liable to be thus translated are cutaneous eruptions, rheumatism, &c. &c.

The effects of disease of the heart are hysterical and hypocondrical distress, gastric irritation, epilepsy, syncope, blindness, tedium vitæ, disturbed respiration and pains about the heart. A sensation of emptiness and of craving for food are common effects of derangement of the heart, which is often aggravated by the tonic plan of treatment frequently resorted to in such cases.

Cerebral irritation is a very common result of excessive action of the heart. This is especially the case when the heart is hypertrophied, for then the blood is driven by the organ with force into the head, giving rise, at times to madness, palsy, apoplexy, paralysis. Apoplexy is, indeed, a very common termination of neglected or badly treated affections of the heart.—Sometimes death is produced by the mere distension of the vessels, without any effusion. Among the consequences of cardiac disease is, also, a sense of sinking of the organ and falling in of the ribs.

It is worthy of particular notice that the author ascribes many of the disorders of the heart to a disproportion between the parts of the sanguiferous system, congenital or acquired. When this is the case, violent exertion or other cause of excitement, exercising the weaker parts too violently, may create a sudden transition from apparent health to alarming disease. The author calls this disproportion between the organs *asymmetry*. It may exist between the two sides of the heart, or between the auricles and ventricles, or between the heart and the great vessels.

Pericarditis and carditis are according to the confession of our author, not to be distinguished from each other with sufficient precision for practical purposes. Very common results of these inflammations are ossification of the valves and coronary vessels, and aneurism, with or without hypertrophy.—The characteristic symptoms of carditis are excessive palpitation, irregular, highly excited and hard pulse; laborious and painful respiration; oppression about the sternum; fulness of the arteries of the neck; morbid heat; face tumid, flushed or leaden; subsequently, features furrowed; eyes prominent, moist and shining; urine scanty; bowels costive. When disease severe, syncope and burning heat; pulse of left wrist more frequent and less regular than that of right; great irregularity in beat of the radial arteries. There is great distress and panting on ascending any height, or after sudden exertion of the arms—terrifying dreams—dryness and heat of the fauces, and even, at times, angina, diverting the attention of the physician from the real disease. There are also exhausting sweats; frequent catarrhs; effusions into serous cavities.

The diagnosis of *pericardial dropsy* is generally made by the patient, he being concious of the heart's moving in a liquid. Other signs are palpitations and tremors; deliquium; dyspnœa in the supine posture; dry cough; hard and frequent pulse. The pulsation of the heart is felt at different points in the chest, because of the locomotion of the heart in the distended sack; obscure tremor under the ribs, extending far. *Face always tumid;* dry and cold skin and extremities. Testa does not confide in percussion as a means of ascertaining the nature of the disease. It very frequently occurs in females, pregnant or in the puerperal state. They are then prone to membranous diseases generally.

Blood and elastic fluids are sometimes effused into the pericardium without rupture of heart or vessels, as is manifest from cases stated. Among the morbid alterations of this organ, described by the author, are polypi, sarcoma, ossifications, petrifactions, &c. Some polypi are merely secondary and symptomatic, formed just before death. But others are morbid growths, resulting from the exudation of fibrinous matter; these he thinks to be produced by blood imperfectly combined and elaborated, in consequence of disease of the lungs. Cases are given in which these permanent polypi were found, perfectly organized and floating in the cavities of the heart, being attached to some part of its walls, or to those of the great vessels.

(*We must conclude our abstract of the Pathology of the Heart in our next.*

Reflections on the Morbid Phenomena caused by the use of Iodine—by Dr Jahn. The author of this paper, published in the Journal Complem. for Feb. 1830, inform us that in the part of country where he resides, there prevails a species of bronchocele which, to all appearance, is a simple hypertrophy of the thyroid gland. He affirms that this affection is never seen where the water springs from ground that is basaltic, porphyritic, granitic, or gravelly; whereas it is constantly observed where the waters issue from calcareous soils, and contain a quantity of lime in mixture. Iodine is the remedy which is generally employed for bronchocele in this part of the country, and he has had ample opportunities, he says, for remarking its effects on the animal organization. Orflila shewed that this powerful medicine, in large doses, occasioned pains in the stomach, malaise, vomiting, diarrhœa, syncope, oppression, ptyalism, tremors, &c. Symptoms of this kind were observed by our author in a man who had swallowed, by mistake, an inordinate dose of the tincture of iodine. In other cases where the medicine was merely continued longer than proper, Dr. J. was struck with the slow but great absorption of fat, preceded and accompanied by an augmentation of all the secretions and excretions. He observed the skin became dark-coloured, and the perspiration viscid—the breathing embarrassed—the urine abundant—the bowels loose and very bilious—the catamenia (in females) more copious. From these phenomena our author argues that the functions of the venous and absorbent vessels are much increased, in proportion as the nutritive system has been diminished. The blood, he says, becomes thinner than natural, and less abundant in fibrine. If the medicine be continued, in these cases, various bad consequences ensue. He mentions two cases where he opened the bodies of patients who laboured under the excessive use of iodine, and where the emaciation was extreme, and the viscera in a very flabby state. Still Dr. J. considers the medicine in question as one of the most valuable which has been discovered within the last hundred years. Indeed he terms it "un remede divin."

In scirrhus of the pylorus Dr. J. affirms that iodine has sometimes removed the malady, when early applied, and when aided by leeches. The same has been stated by Wagner, Henneman, Hufeland, and others. We would strongly recommend the medicine in question to be tried in dropsical cases dependent on visceral obstructions. [*Med. Chir. Rev.*

Lupus treated by the Iodine of Mercury.—"One very interesting case of this disease was in the Hospital for some months. I mention it here, because it has been greatly benefited by a medicine which is not yet much employed in this quarter; I mean the iodine of mercury.

"A. A. a healthy country girl, aged 21, had suffered under lupus for thirteen months at the time she was admitted. The tip and alæ of the nose were the parts affected, and there was a small portion of the cheek also involved, and the disease had in some degree spread to the inside of the nostrils. It presented in several places the distinct tuberculated appearance of lupus, and in other places had proceeded to ulceration, although this was not very deep. She had undergone a course of mercury, and used a great many

local applications; among which were the nitrate of silver and a solution of arsenic, but with little permanent benefit. After her admission, lunar caustic was repeatedly applied to the affected parts, and she used an ointment composed of mercury, camphor, and turpentine, and also a strong arsenical ointment, but not with much effect. The iodine of mercury, in the proportion of six grains, and afterwards nine grains, to an ounce of simple ointment, was then used daily, and under this application many parts skinned over, and the disease was in a great measure subdued. She used it for several weeks in the Hospital, and since she was dismissed some of the small tubercles have re-appeared, but were speedily destroyed by the slight ulceration produced by the ointment. In this case, the disease, although not yet completely eradicated, has been kept under, and more completely relieved by this, than by any other application.

"I have also used the same preparation, but stronger, in a case of curious anomalous tumours of the face, somewhat resembling the melanosis, but evidently not malignant, although it could not prevent the re-appearance of the affection. I think this preparation of iodine and mercury will be found to answer in many cases of ulcerations where other escharotics, murias hydrarg nitras argenti, arsenic, &c. have failed.

Here we must stop for the present, but some interesting cases remain to be noticed at a future opportunity. [*Med. Chir. Rev.*

MEDICAL SCHOOL OF MAINE.

The course of Medical Lectures at Bowdoin College for 1830, closed on Saturday, May 15th. The examination of Candidates for the Degree of Doctor in Medicine commenced on the following Monday morning, and continued until Saturday noon. Of a class consisting of *ninety-nine* pupils, *thirty-six* candidates for a Degree, passed a satisfactory examination before the Faculty of Medicine. The following list contains the names of the young gentlemen, their places of residence, and the subjects of their dissertations.

Benjamin Atkinson, *Newburyport*, Ms. on Tetanus. Aaron G. Babcock, *Princeton*, Ms. Animal Electricity. Ariel Ballou, *Cumberland*, R. I. Jaundice. Ezekial M. Bartlett, *Bethel*, Carduus Canadensis. H. Bourne, A. B. *Attledorough*, Ms. Influence of Nervous Irritation on the Mind. Benjamin F. Buxton, *Warren*, Ictodes Fœtidus. Moses P. Cleaveland, A. B. *Brunswick*, Cæsarean Operation. Luther Cross, *Keene*, N. H. the Nerves. Alexander H. Day, *St. Augustine*, E. Florida, Contagiousness of Yellow Fever. Joseph P. Dorr, *Chatham*, N. Y. Retention of Urine. Franklin P. Fletcher, *China*, Mensuration. Octave C. Foitier, *Quebec*, L. Canada, Phthisie Tuberculeuse. Moses Frost, *Norway*, Typhus Fever. Jared Fuller, *Hampton*, Conn. Opium. Franklin Gage, A. B. *Augusta*, Fungus Hæmatodes. George W. Goodwin, *South Berwick*, Blood-letting. Jerome Harris, *Methuen*, Ms. Secale Cornutum. Nahum Jordan, A. B. *Ellsworth*, Hæmoptyis. Sherman M'Lean, *Andover*, Conn. Necrosis. Calvin M'Questen, *Bedford*, N. H. Dyspepsia. Wm. Marriett, *Standich*, Phthisis Pulmonalis. Robert S. Morrill, *Canterbury*, N. H. Osteitis. Selim Newell, *Derby*, Vt. Diabetes Melitus. John D. Pilsbury, *Pembroke*, N. H. Hepatitis. Hosea Powers, *Sandford*, Chorea. Isreal Putnam, A. B. *Sutton*, Ms. Conception. Thomas Roberts, *Bethel*, Enteritis. Luke W. Stanton, *Norwich*, Ms. Organic Affections of the Heart. Enos H. Thompson, *Avon*, Cholera. Isaac Thompson, *Rumford*, Scrofula. Erastus C. Torrey, A. B. *Windsor*, Vt. Hepatitis. Nathaniel C. Towle, *Wolfborough*, N. H. Indigenuous Medicines. Isaac Waterhouse, *Poland*, Blisters. Thomas White, *Bethel*, Phrenitis. Albert Williams, A. M. *Boston*, Ms. Functional Derangement of the Digestive organs. Lewis Whitney, *North Yarmouth*, Influence of the Imagination on the Fœtus in Utero.

Eastern Galaxy.

MEMORIAL

OF

THE TRUSTEES

OF THE

UNIVERSITY OF MARYLAND,

AND THE

TRUSTEES OF BALTIMORE COLLEGE,

TO THE

LEGISLATURE OF MARYLAND.

BALTIMORE:
JOHN D. TOY, PRINTER,
Corner of Market and St. Paul streets.
1830.